

REMARKS

Re-examination and allowance of the present application is respectfully requested.

Initially, Applicants again note that the last Office Action is silent with respect to the acceptability of the drawings. Accordingly, Applicants conclude that the drawings filed with the application have been accepted, and no replacement drawing sheet(s) are required.

Applicants respectfully traverse the Examiner's 35 U.S.C. §103(a) rejection of claims 1-3, 10-13 and 15-19 as being unpatentable over U.S. Patent 5,204,969 to CAPPS et al., in view of U.S. Patent 6,034,925 to WEHMEYER.

According to the present invention, an apparatus and method is disclosed for generating sound labels that describe sounds or representations thereof belonging to different sound families, with each sound family being characterized by a sound model defined by a model label. A plurality of sound generators generate different families of sounds. Each sound generator has a specific set of parameters with corresponding parameter values that are selectable to generate sounds belonging to a sound family. One or more parameter values of the specific set of parameters are associated with value labels contextually related to the model label of a corresponding sound model characterizing the sound family. A selection of at least one parameter value automatically selects an associated value label that is arranged to be concatenated with the model label of the corresponding sound model to form

a descriptive sound label that provides content-related information describing the sound generated or representation thereof. Applicants submit that this is neither disclosed or suggested by the applied art of record, either individually or in the combination set forth by the Examiner.

CAPPS discloses a system that includes a sound editor that displays sound waveforms, permit a user to mix together several simultaneously displayed waveforms, and to change a pitch and amplitude of one part of each waveform via a screen display (see, for example, the Abstract). The purpose of the system of CAPPS is to edit sounds, and not to describe sounds. In CAPPS, the sound models are "Music", "Voice", "Foot Step" and "Gun Shot", as illustrated in, for example, Fig. 4B of the drawings. The parameters of the sound editor are "Bender" and "Envelope" effects (see, for example, col. 4 lines 58 to 62 and col. 5 lines 27 to 38). The parameter values of the Bender effect are 1 Octave and 2 Octaves e.g., (buttons 53D and 53E of Fig. 5). However, Applicants submit that these parameters and their corresponding values are generic, i.e., common to all sound models "Music", "Voice", "Foot Step", etc., and is not specific to any one of them.

On the other hand, unlike the parameters "Bender" and "Envelope" effects of CAPPS, the present invention, as defined by the claims, specifies that each sound generator has its own specific set of parameters. Having its own specific set of parameters is particularly advantageous, since this allows a sound model to produce a more constrained range of sounds within the sound family with a distinctive

behavior and identity as compared to sounds from another sound family. Thus, the sound model of the present invention produces sounds that more closely simulate a sound phenomenon (see, for example, page 14 lines 19 to 26 of Applicants' specification). Applicants submit that this feature is clearly not disclosed or suggested in CAPPS.

The labels "1 Octave" and "2 Octaves" (e.g., buttons 53D and 53E of Fig. 5) of CAPP merely relate to a direct translation of what are parameter values associated with buttons 53D and 53E, and do not assist in describing/clarifying the characteristic of any of the sound models "Music", "Voice", "Foot Step", etc., the term "Music" being a "model label". Thus, Applicants submit that the model label and the labels "1 Octave" and "2 Octaves" are not contextually related.

This differs from Applicants' instant invention, as defined by the pending claims, in which the value labels are contextually related to the model label. Since the model label is related to a feature of the sound model, and the labels are contextually related to the model label, when the model label is concatenated with the value label, the formed sound label provides a contextual description of the content of the generated sound. Applicants submit that this effect is not possible from the teachings of CAPPS.

The sound models "Music", "Voice", "Foot Step", etc., and the values of the parameter "Master Gain" (e.g., button 46D of Fig. 4B) of CAPP are presented on the same display, resulting in the Examiner asserting that the parameter values and the

names of the sound models are “combined”. Even if such an assertion is correct (and Applicants submit that it is not), the names “Music”, “Voice”, etc. are clearly not concatenated with the parameter values of “Master Gain”, and cannot be used to provide a suitable description of the sound generated.

On the other hand, Applicants’ presently claimed invention specifies that the value labels are concatenated with the model labels to form a descriptive sound label to provide content-related information that describes the sound generated or representation thereof. Applicants submit that this feature is also not suggested or taught by CAPPS.

Applicants note that the Examiner appreciated that CAPPS does not disclose labels that provide content-related information that describes the sound generated or representation thereof. However, Applicants respectfully traverse the Examiner’s assertion that this feature is disclosed in WEHMEYER.

WEHMEYER is directed to a method for identifying a recording medium in a jukebox. A controller and media reader are used to identify various physical and logical characteristics of data stored in a pre-recorded medium 105 (see, for example, Abstract and Fig. 1). Examples of these characteristics are provided, for example, in the Abstract and at col. 2, line 55 to col. 3 line 4. As disclosed in the Abstract and col. 2, lines 47 to 54 of WEHMEYER, the characteristics are used to search a database that contains stored sets of characteristics which are associated with respective content-identifiers, such as, for example, CD/video titles, song/video

titles, and length of audio or video programs included in the medium.

Even if one were to assume that the Examiner is correct that the content-identifiers, such as song titles, are the sound labels of the present invention (and Applicants submit such a conclusion is erroneous), the characteristics associated with the song titles are not used to generate audio, and do not affect the audio in any way. Thus, Applicants submit that the “characteristics” suggested by WEHMEYER cannot be considered to be analogous to Applicants’ claimed “parameter values”, which are used to generate sounds belonging to a family of sounds. Further, since there are no parameter values, the other points of novelty mentioned above with respect to CAPPS also apply to WEHMEYER.

Accordingly, Applicants submit that even if one attempted to combine the teachings of CAPP and WEHMEYER in the manner suggested by the Examiner, one would fail to arrive at the presently claimed invention, as such a combination would lack at least the above-discussed features. Consequently, Applicants submit that the combination of CAPPS and WEHMEYER do not produce the features of the present invention, as defined by the pending claims, and thus, the pending claims are novel and inventive over these citations.

By the current amendment, Applicants submit new independent claim 20 for the Examiner’s consideration. In view of the submission of new claim 20, claim 3 is canceled and the other pending claims are revised to be consistent with claim 20.

New independent claim 20 is based upon canceled claims 1 and 3. The claim

has been presented to clarify that sound labels for describing sounds belonging to different sound families are generated. Claim 20 clarifies that the sound labels are used to describe, rather than to identify, and that the labels carry information that assist in explaining the sounds or representation thereof. As is clear from the discussion at, for example, page 22, line 7 to page 23, line 22 of Applicants' specification, each sound family is characterised by a sound model (e.g.; "Foot Steps" model has parameters characterising sounds that are related to the footsteps family). As explained at, for example, page 40 line 26 of Applicants' specification, each model has a model label.

New independent claim 20 further specifies that each sound generator has its own specific set of parameters, as can be understood from the sound models illustrated in Figs. 5 to 13 of Applicants' drawings. Independent claim 20 additionally specifies that the value labels are contextually related with the model label of a corresponding sound model, in accordance with the description provided at, for example, page 37, line 22 to page 38, line 6 of Applicants' specification, such that the model label is the root of the model's structure and the value labels are the "attributes" of the root, meaning that the content of the value labels are contextually related to the model label. For example, the labels "fast" and "slow" of the parameter "Speed" go towards defining the characteristics of the "Foot Steps" sound model.

New independent claim 20 additionally specifies that the value label is concatenated with the model name to form a descriptive sound label. The basis for

this feature may be found, for example, at page 44, lines 13 to 17 of Applicants' specification, which discloses that labels are "strung together" to form the sound label.

As claims 2 to 15 depend from claim 20, Applicants submit that these claims are allowable for at least the same reasons applicable to claim 20, and respectfully request such an indication from the Examiner.

New independent claim 21 is also submitted for the Examiner's consideration. Claim 21 replaces former claim 16, from which it is based, and includes the above-discussed features. Accordingly, Applicants submit that independent claim 21 is allowable for the same reasons discussed above with respect to independent claim 20.

Applicants submit that the other documents applied by the Examiner in the last Office Action fail to disclose that which is lacking in CAPPS or WEHMEYER. For example, EISENBRANDT et. al. is directed to an electronic input control for an oven, while MENENDEZ et. al. is directed to a method of creating packages for a pointer-based computer system. Applicants submit that neither reference is concerned with sound systems or labelling of a sound or a representation of a sound. Further, neither reference discloses or suggests the customizing of value labels.

Applicants also submit new dependent claims 22-25 for the Examiner's consideration. Support for claim 22 may be found, for example, at page 21, line 20

to page 22, line 1 of Applicants' specification, which discloses that the generated sound is arranged to model a sound sample, and the formed sound label is used to provide content-related information describing the sound sample.

Support for new claim 23 may be found, for example, at page 40, lines 13 to 16 of Applicants' specification, which discloses the customization of the description of the value labels.

Support for new claim 24 may be found, for example, at page 14, lines 26 and 27 of Applicants' specification, which discloses a set of parameters include parameters that are unique to a specific sound generator.

New claim claim 25 relates to the automatic selection of parameter values. Support for this feature may be found, for example, at page 45, line 26 to page 46, line 3 of Applicants' specification, which discloses generating a label by calling a comparison function.

As new claims 22 to 25 depend on either independent claim 20 or 21, Applicants submit that these claims are allowable for at least the reasons applicable to claims 20 and 21, and respectfully request such an indication from the Examiner.

In this regard, Applicants have the following comments with regard to new claim 23. In the last Office Action, the Examiner construed the wording "1 Octave, and 2 Octaves" (in CAPPS) associated with buttons 53D, 53E as the value labels of the present invention. However, Applicants submit that it is clear that a user can only click on the buttons to select whether to process a sound by 1 or 2 Octaves (see

column 5, lines 3 to 7 of CAPPS). Applicants submit that CAPPS fails to disclose or even suggest, for example, being able to customize the labels for example, changing the label to 5 Octaves or 10 Octaves, which, of course, would not make sense since the sound editor and system of CAPPS allows a user to edit sounds but not the transformation algorithm of editing the sounds, and thus, there is no motivation to provide labels with content that can be customized.

Further, Applicants submit there is no element in WEHMEYER that can be considered as being equivalent to Applicants' "parameter value". As this reference fails to suggest the presence of value labels, Applicants submit that it is not applicable to new claim 23. Thus, in view of the above, Applicants submit that claim 23 by itself is patentable over the applied art of record.

SUMMARY AND CONCLUSION

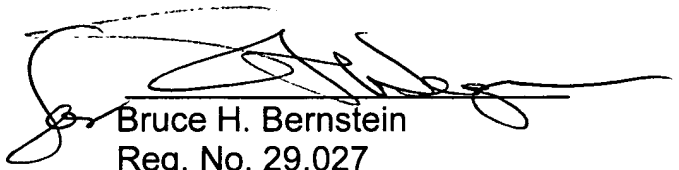
In view of the fact that none of the art of record, whether considered alone or in combination, discloses or suggests the present invention as now defined by the pending claims, and in further view of the above amendments and remarks, reconsideration of the Examiner's action and allowance of the present application are respectfully requested and are believed to be appropriate.

Should the Commissioner determine that an extension of time is required in order to render this response timely and/or complete, a formal request for an extension of time, under 37 C.F.R. §1.136(a), is herewith made in an amount equal to the time period required to render this response timely and/or complete. The

Commissioner is authorized to charge any required extension of time fee under 37 C.F.R. §1.17 to Deposit Account No. 19-0089.

If there should be any questions concerning this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
Lonce LeMar WYSE et al.



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